

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A device for the opening and closing of one or more reaction vessels, comprising:
 - a holding device capable of non-rotatable holding of the one or more reaction vessels, wherein the holding device has a clamping mechanism to clamp and hold the one or more reaction vessels, the holding device comprising:
 - three perforated plates arranged one above the other as a bottom plate, a middle plate and a top plate, each of the perforated plates having a plurality of openings to hold the one or more reaction vessels,
 - the top plate and the bottom plate being fixed in a stationary position with the openings in the top plate directly aligned with the openings in the bottom plate, the middle plate being capable of sliding in a longitudinal direction between a first position in which the openings in the middle plate are aligned with the openings of the top plate and the bottom plate, and a second position in which the openings in the middle plate are arranged offset relative to the openings of the top plate and bottom plate,
 - whereby when the middle plate is in the first position the one or more reaction vessels can be inserted into or removed from the openings of the perforated plates, and when the middle plate is in the second position the middle plate presses and immobilizes the one or more reaction vessels in the holding device, and
 - a means for moving and fixing the middle plate in the second position;

a gripper capable of gripping a lid of one of the reaction vessels, the gripper comprising; wherein the gripper has
a blind bore, and
at least two gripping jaws comprising a gripping surface effective to hold the
lid, and the gripper has no active operating device for opening and closing the
gripping jaws, wherein the gripping jaws are arranged so that the lid can be
inserted between the gripping jaws, and the lid is held by the gripping jaws
through frictional contact while the lid is lifted off the reaction vessel; and

a handling arm comprising at one end a rotating mechanism comprising a rotatably
driven pin that is fixed in the blind bore of the gripper and rotates the gripper with
the inserted lid clockwise/counterclockwise with respect to the longitudinal axis the
reaction vessels to which the gripper is attached, whereby the rotating mechanism can
apply torque to the gripper and therefore to the lid when held by the gripping jaws,
resulting in the opening and closing of the one or more reaction vessels.

2. (Currently Amended) The device according to claim 1, wherein the gripping jaws comprise insertion slopes running downwards and radially outwards from lower edges that
adjoin the lower edge of the gripping surfaces.
3. (Currently Amended) The device according to claim 1, wherein the gripping surface comprises one or more vertically running cutting webs running at right angles to the
direction of rotation.
4. (Currently Amended) The device according to claim 3, wherein the height by which the one or more cutting webs project beyond the gripping surface is 0.5 mm less than the wall
thickness of the one or more reaction vessels.

5-8. (Canceled)

9. (Previously Presented) The device according to claim 1, wherein the middle plate contains a plurality of projections each extending into the interior of each of the plurality of openings, each projection being located at an edge of the opening at the intersection of the central axis of the opening and the boundary edge of the opening at the longitudinal direction of sliding.

10. (Previously Presented) The device according to claim 9, wherein the top plate and/or the bottom plate contains a plurality of projections each extending into the interior of each of the plurality of openings, each projection being arranged opposite the projection of the corresponding opening of the middle plate.

11-13. (Canceled)